

REMARKS

Amendments

The Office Action of November 2, 2006 has been carefully considered. Reconsideration of this application, as amended, is respectfully requested. The above-indicated amendments (cancellation of non-elected claims 14-19) are believed to place the application in condition for allowance or to reduce the issues on Appeal. No new matter has been added by the amendments and Applicants respectfully seek the entry of the proposed amendments at this time (the restriction having been made final and non-elected claims having been withdrawn from consideration).

The Examiner's previous objection to claim 11 for a grammatical informality is understood to have been withdrawn in view of the prior amendment of claim 11.

Finality of Instant Office Action is Premature

Applicants respectfully maintain that the finality of the present office action is premature. Applicants, having successfully traversed the rejection of several claims in the prior office action (e.g., claims 11, 13), are now presented with a final action. More specifically, Applicants successfully noted that the specific limitations relative to the grinding step set forth in claim 11 were not taught by the patents relied upon (claim 11 being amended only to add a "period," the limitations of the grinding step were present in the as-filed claim). Applicants also correctly noted that the rejection of claim 13, and the limitations set forth therein ("scored with a diamond saw to facilitate uniform stress releasing fracture") were not supported by any references made of record. In the present action, the Examiner has added Chiuminatta (or alternatively Phillips) to the prior rejection. As the scoring limitation expressly set forth in claim 13 was found in the as-filed claims, the addition of Chiuminatta (or Phillips) to teach such a limitation could not have been necessitated by Applicant's amendments to other claims – alleged as the basis for making the present action final. Hence, the withdrawal of the finality of the present action is respectfully requested, particularly in view of the fact that the instant office action, for the first time, sets forth any support for the rejection of claims 11 and 13.

Rejections

Turning now to the rejections set forth in the office action, claims 1-10 were rejected under 35 U.S.C. §103(a) as being unpatentable over Shaw et al., U.S. Patent 6,033,146 (“Shaw”) in view of Danielsson, U.S. Patent 4,281,496 (“Danielsson”). Claim 13 was rejected under 35 U.S.C. §103(a) as being unpatentable over Shaw in view of Danielsson, as applied to claims 1-10, and further in view of Chiuminatta et al., U.S. Patent 5,086,750 (“Chiuminatta”). Claims 1, 3-5, 6 and 13 were rejected under 35 U.S.C. §103(a) as being unpatentable over Phillips, U.S. Patent 5,441,677 (“Phillips”). Claim 11 was rejected under 35 U.S.C. §103(a) as being unpatentable over Phillips, as applied to claims 1, 3-5, 6 and 13, in view of Surface Preparation (understood to be Applicants-cited document #12 for “Surface Preparation; High Production Diamond Grinding, Polishing and Dust Extraction Systems” from www.concretemedic.com.) Claim 12 was rejected under 35 U.S.C. §103(a) as being unpatentable over Phillips in view of Surface Preparation, as applied to claim 11, and further in view of Jones, U.S. Patent 6,454,632 (“Jones”).

35 U.S.C. 103(a)

Claims 1-10 were rejected under 35 U.S.C. §103(a) as being unpatentable over Shaw in view of Danielsson.

Shaw discloses a surface-seeded, exposed particulate concrete. Relative to surface seeding/exposure, Shaw teaches at col. 1, lines 22-48, that the exposure of aggregate leads to surface roughness when large aggregate is used and precludes use of the technique in flooring. Applicants understand such teaching to indicate that the aggregate exposure taught by Shaw does not remove the aggregate material itself (no more than 5%; col. 4, lines 36-50), but merely exposes a surface of such aggregate. While Shaw does suggest that sandblasting, acid etching or grinding and polishing may also be used to create texture variations (col. 4, lines 63-65), Applicants understand these treatments to be selective treatments to create texture variations, which would appear to teach away from the present invention – a generally planar and smooth surface.

Previously amended claim 1 specifically recites, in order, preparing and forming the region to be poured, contiguously pouring concrete in the region, floating the concrete,

allowing the concrete to cure to a semi-stiff state, finishing the exposed upper surface of the concrete to a generally planar surface, disbursing decorative aggregate over only the surface, and integrating the aggregate into the upper surface of the semi-stiff concrete. These steps are then followed by partially curing the concrete with the integrated aggregate, grinding the upper surface of the partially cured concrete having the integrated aggregate therein, including partially removing some integrated aggregate material at least until the aggregate is exposed uniformly over the top of the concrete, fully curing the concrete with the integrated aggregate, and polishing the upper surface with the integrated aggregate to provide a generally planar and smooth surface on the monolithic concrete floor.

Applicants urge that although some steps of the recited method of claim 1 may appear similar to the teachings of Shaw, several steps are not taught by Shaw. The Examiner acknowledges that Shaw does not teach the recited grinding step on the partially cured concrete. Moreover, the recited order of the steps is not disclosed by Shaw, and Shaw teaches away from the recited limitation of grinding the upper surface until aggregate is exposed uniformly. In particular, Shaw fails to teach partially curing the concrete, followed by grinding the upper surface of the partially cured concrete, including removing some integrated aggregate material at least until the aggregate is exposed uniformly over the top of the concrete, and then fully curing the concrete with the integrated aggregate before polishing the upper surface with the integrated aggregate to provide a generally planar and smooth surface.

Danielsson is alleged to provide an analogous method, presumably to Shaw, however Applicants respectfully challenge the Examiner's suggestion that it would have been obvious to modify the teachings of Shaw with those of Danielsson. First, Applicants urge that Danielsson is not directed to providing an exposed surface flooring, but to a subfloor upon which "tile, carpeting or the like" may be applied (see object of the invention at col. 5, lines 53-55). Second, Danielsson clearly teaches away from Shaw at col. 7, lines 37-63, where the step of densification is described in detail. Applicants note that such a step is entirely contrary to the teachings of Shaw (see col. 3, lines 54-64), which suggests no use of any tamping or densification operations. Accordingly, absent some other suggestion, Applicants respectfully contend that the combination of Shaw and Danielsson is improper and that the contrary teachings found therein teach away from the proposed combination.

Applicants further submit that the teachings of the densification operation of Danielsson clearly establishes that the densification is employed to produce an upper layer of sand, concrete and water (col. 7, lines 38-40), such that a thin surface layer (col. 8, lines 7-9) can be removed to “produce a flat, porous surface having a sanded quality...” (col. 8, lines 8-10). Danielsson does not appear to teach the removal of aggregate in the grinding operation, and in fact specifically teaches densification so as to cause the upper layer to be substantially free of aggregate (even that within the concrete mixture). Applicants, once again, urge that such a teaching is contrary to the teachings of Shaw and to the limitations set forth in the rejected independent claim 1. As a result of the contrary teachings of Shaw and Danielsson, Applicants respectfully maintain that *prima facie* obviousness has not been established, and the new rejection of claims 1-10 is respectfully traversed.

Considering, *in arguendo*, a rejection based upon the alleged combination of Shaw in view of Danielsson, as noted above, both Shaw and Danielsson fail to teach or suggest the recited limitation of “grinding the upper surface of the partially cured concrete with the integrated aggregate therein, including partially removing some integrated aggregate material at least until the aggregate is exposed uniformly over the top of the concrete” (emphasis added), as set forth in claim 1. Absent a teaching of all claim limitations, the rejection for obviousness is incomplete. Hence, Applicants further traverse the rejection based upon the arguable combination of Shaw in view of Danielsson.

As for claim 6, the Examiner appears to, once again, base the rejection on Shaw. Shaw is urged as defining a semi-stiff state at col. 4, lines 14-16, where the aggregate is described as not initially depressing below the top surface, and later at lines 26-30, where the state of the particulate AND concrete “has sufficiently set such that a finger impression ... is made upon manually pressing with fingertips....” Not only do the cited portions of Shaw fail to teach the specific limitations of claim 6 (which further recites how the semi-stiff state of claim 1 is determined), but they also are not directed to the same point in the process – claim 6 characterizing the state of the concrete before the upper surface is finished, followed by disbursing the aggregate over the surface. Accordingly, Shaw does not teach the limitations of claim 6.

Having acknowledged, once again, that Shaw fails to teach the limitations of claim 6, the Examiner nonetheless seeks to support the rejection alleging some sort of “material-

way-condition" analysis, and maintains that the limitations of claim 6 would be obvious in light of Shaw's teachings. Applicants respectfully urge that the limitations of claim 6 are not found in Shaw, and that as a result the Examiner has not established a *prima facie* rejection to which Applicants can or must respond. Accordingly the rejection is respectfully traversed.

In the event this rejection of claim 6 is maintained, Applicants further request that a subsequent communication set forth in detail, those teachings relied upon or employed by the Examiner to support the conclusion that the limitations set forth in claim 6 "do not appear to define a manipulative step." Applicants maintain that the limitations, in combination with claim 1, define a method, and as set forth in claim 6, the determination of the state of the concrete before proceeding with the finishing and disbursing steps.

Relative to dependent claims 8 – 10, Applicants also note that the Examiner appears to have, once again, erroneously relied upon Applicants' disclosure for a teaching of limitations not found in Shaw or Danielsson. In particular, Shaw teaches the application of a "hydrolyzed alkali silica solution, preferably lithium quartz sealer" causing "formation of "an insoluble silicate structure, which acts as a protective barrier, reducing the permeability of the surface to water." (col. 4, line 65 – col. 5, line 16), whereas claim 8 recites the application of a hardening compound. Moreover, as explained in the present application, such materials may be applied to provide a highly-polished surface appearance. Moreover, Shaw also acknowledges that chemical treatment may be omitted when non-reactive aggregates are used (col. 5, lines 21-24) – supporting Applicants' interpretation of Shaw's teachings as being for sealant purposes, not hardening. The rejection of claims 8 – 10 is respectfully traversed. Should this rejection be maintained, Applicants respectfully request that the Examiner identify where the specific limitations of claims 8 – 10 are set forth in Shaw or Danielsson.

Claim 13 was rejected under 35 U.S.C. §103(a) as being unpatentable over Shaw in view of Danielsson, as applied to claims 1-10, and further in view of Chiuminatta. Applicants respectfully traverse the rejection for the reasons set forth above relative to claim 1 as though incorporated herein in their entirety. For the sake of brevity Applicants respectfully reserve the opportunity to set forth additional limitations and arguments supporting traversal of the rejection of dependent claim 13 in a subsequent response.

Claims 1, 3-5, 6 and 13 were rejected under 35 U.S.C. §103(a) as being unpatentable over Phillips. As noted by the Examiner, Phillips does teach “[a] method of fabricating a concrete floor having an autogenous hard high gloss finish that does not require further coatings” as set forth in the Abstract. As further set forth in the Abstract, the “floor surface layer is created by applying an amount of a dry shake dressing material containing quartz crystals and a coloring agent, but no coarse aggregate, to the upper surface of the slab and floating the surface until the finishing layer reaches predetermined amount which cures to form a generally monolithic structure with the slab but having a higher compressive strength when fully cured.” (emphasis added).

Notably, the rejection is based upon §103, and Applicants understand this to be an indication that Phillips does not anticipate the rejected claims, but that the recited limitations would have been obvious to one of ordinary skill in the art. It is, however, unclear from the rejection, just what the Examiner relies upon as being taught by Phillips that would render the claimed invention obvious, unless it is the Examiner’s statement at p. 7, that “changing the sequence in which process steps are completed has been held to be *prima facie* obvious absent unexpected or new results.” (italics in original) To this Applicants respectfully submit that, as described below, Phillips does not teach the recited steps and limitations of the rejected claims, and further that the claimed invention is able to achieve an ornamental surface by, in part, applying decorative aggregate to a semi-stiff concrete surface - a new result that is not taught or suggested by Phillips.

Phillips describes the application of a dry cementitious material (see Phillips’ shake mixture description; col. 3, lines 60-63) that is added in multiple increments over the surface of the poured concrete (col. 6, lines 34-51). Applicants further note that a substantial layer produced from the dry shake is clearly indicated by the intentional pouring of the initial concrete to a level approximately 0.5 inches below the desired grade (col. 3, lines 54-56 and col. 6, lines 18-22), thus indicating that the shake layer is added on top of the floated concrete layer. On the other hand, claim 1 recites integrating decorative aggregate into the upper surface of semi-stiff concrete. Clearly the claimed invention further avoids the multiple steps described by Phillips to deposit the dry shake material.

The rejection states that Phillips teaches a method of making a high gloss concrete floor, but does not allege that Phillips teaches “[a] method for forming an integrated

ornamental surface on a monolithic concrete floor concurrent with the pouring and finishing" as set forth in claim 1. Moreover, while Phillips does teach preparing a base, pouring concrete and floating the rough concrete, the claimed process and that which is disclosed by Phillips are urged to diverge at this point. More specifically, after floating "applications are made of a dry shake product" that consists of Portland cement, silicon and crystalline quartz, and "the entire surface is, again, finished by floating to the desired texture. This process is repeated until the surface is firm enough to support a finishing blade." (col. 3, lines 57-66). Conversely, the claimed invention recites, after the floating step, allowing the concrete to cure to a semi-stiff state, finishing the exposed upper surface, then disbursing decorative aggregate over the surface and integrating the aggregate into the upper surface of the semi-stiff concrete.

To the best of Applicants' understanding the Examiner next urges that the iterative addition of dry shake material (the last sentence of page 6 being circuitous in its logic), even though acknowledged as "additional process steps not recited in the instant claim" are then urged as being "completed in order at different stages of the repetitious process." Applicants respectfully submit that the teaching of steps not recited in the rejected claims, whether repeated or not, cannot give rise to claimed limitations. If they are not recited then how can they give rise to the recited limitations? Hence, Applicants' position is that Phillips fails to teach, or suggest, disbursing decorative aggregate over the surface of the semi-stiff concrete and integrating the aggregate into the upper surface of the semi-stiff concrete as set forth in claim 1.

The Examiner then appears to erroneously characterize Phillips as teaching partially curing the floor and then grinding to establish the desired surface smoothness. (Office Action, p. 7, top) On the contrary, Phillips specifically teaches that after being sealed, "[t]he floor at this stage of preparation is allowed to cure for approximately 30 days or until the concrete reaches its substantially full compressive strength..." (see col. 4, lines 16-19; col. 7, lines 6-10). Applicants understand Phillips to teach away from the recited limitation of "partially curing the concrete with the integrated aggregate" before grinding as recited in claim 1.

Moreover, Phillips teaches the use of a floor buffing machine, to remove a sealer and to perform initial buffing of the surface. (col. 7, lines 40-56). Applicants note that Phillips does not appear to teach or suggest grinding or "including partially removing some

integrated aggregate material at least until the aggregate is exposed uniformly over the top of the concrete" (emphasis added) as recited in claim 1. In the event this rejection is maintained, Applicants request that the Examiner set forth where such limitations are taught or suggested by Phillips. In view of the various distinctions noted herein, Applicants respectfully submit that Phillips does not teach or suggest recited aspects of the method set forth in claim 1. For this reason *prima facie* obviousness has not been established and Applicants respectfully traverse the rejection as applied to claim 1.

Relative to dependent claims 3-5, 6 and 13, these claims all depended from presumably allowable claim 1 and are believed to be patentable for the reasons and distinctions set forth above relative to claim 1. For the sake of brevity, the patentable distinctions of the dependent claims are not discussed in detail. Applicants note, however, that no teaching is identified for the group of claim 3 or of man-made decorative aggregate as set forth in claim 5.

Relative to the rejection of claim 6, the rejection is incomplete. The Examiner appears to have employed language that is largely verbatim of that set forth in the rejection of claim 6 over Shaw in view of Danielsson – notably, Phillips does not teach what the Examiner has alleged at col. 4, lines 14-16. In the event that this rejection is maintained, Applicants respectfully request that a complete rejection of claim 6 be set forth, and that those portions of Phillips relied upon for the asserted teachings be identified so that Applicants can respond to the rejection. Absent such, the rejection is incomplete and Applicants remain unable to respond further.

Claim 11 was rejected under 35 U.S.C. §103(a) as being unpatentable over Phillips, as applied to claims 1, 3-5, 6 and 13, in view of Surface Preparation (understood to be Applicants-cited document #12 for "Surface Preparation; High Production Diamond Grinding, Polishing and Dust Extraction Systems" from www.concretemedic.com.) For the sake of brevity Applicants again refer to the arguments in traversal of the rejection of claim 1, incorporated herein as though fully set forth. In the rejection, the Examiner acknowledges that Phillips fails to disclose the use of diamond disks. Applicants further submit that Phillips also does not disclose the step of "grinding the upper surface of the partially cured concrete with the integrated aggregate therein, including partially removing some integrated aggregate material at least until the aggregate is exposed uniformly over the top of the concrete" as set forth in claim 1. Moreover, neither Phillips

nor the Surface Preparation document specifically teach or suggest the three-pass process recited in claim 11. Nor has the Examiner alleged that either does so. Hence the rejection fails to establish *prima facie* obviousness through a teaching or suggestion of each of the elements recited in claim 11. The rejection is respectfully traversed.

Claim 12 was rejected under 35 U.S.C. §103(a) as being unpatentable over Phillips in view of Surface Preparation, as applied to claim 11, and further in view of Jones. For the sake of brevity Applicants again refer to the arguments in traversal of the rejection of claims 1 and 11, incorporated as though fully set forth herein. In the current rejection of claim 12, the Examiner adds the teachings of Jones' method of improving and polishing concrete walls, floors and the like (col. 1, lines 12-15) as the basis for the rejection of claim 12. Notably, the Examiner fails to indicate just how one of ordinary skill in the art would have been motivated to employ the methods of Jones when the teachings of Phillips appear to be to the contrary. More specifically, Phillips teaches the removal of the water soluble sealing material (e.g., col. 4, lines 40-44; col. 7, lines 40-44), and appears to teach away from waxing or other coatings in favor of the shake surface and its natural surface grit (col. 8, lines 9-13); whereas Jones appears to suggest that the material be permitted to remain on the surface. Applicants respectfully urge that Phillips and Jones appear to teach away from one another.

Applicants further submit that the basis for the combination proposed in the rejection – for purposes of hardening/densifying as taught by Jones, is also contrary to the teachings of Phillips, which make clear that “[t]he surface of the floor produced in accordance with the present invention is also extremely hard and difficult to damage.” (col. 8, lines 3-6). It would appear that hindsight reconstruction of claim 12 was the motivation for the combination rather than the teachings of the patents themselves – particularly where Phillips states that the surface produced is extremely hard. In the event the rejection is maintained, Applicants respectfully request that the Examiner identify where the Examiner finds a suggestion that the surface of Phillips floor requires or would benefit from the materials described by Jones. Otherwise, Applicants respectfully submit that *prima facie* obviousness has not been established by the arguable combination, and that the rejection of claim 12 is respectfully traversed.

Conclusion

In view of the foregoing remarks and amendments, entry of the proposed amendment and withdrawal of the finality of the instant action is solicited along with a further reconsideration of this application and allowance thereof. In the event that additional fees are required as a result of this response, including fees for extensions of time, such fees should be charged to USPTO Deposit Account No. 50-2737 for Basch & Nickerson LLP.

In the event the Examiner considers personal contact advantageous to the timely disposition of this case, the Examiner is hereby authorized to call Applicants' attorney, Duane C. Basch, at Telephone Number (585) 899-3970, Penfield, New York.

Respectfully submitted,



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